=> d ibib abs ind l5 1-2

L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:736391 HCAPLUS
DOCUMENT NUMBER: 137:228940
TITLE: Method of extracting virus from cell culture
INVENTOR(S): **Coffey, Matthew C.; Thompson, Bradley G.**
PATENT ASSIGNEE(S): Oncolytics Biotech, Inc., Can.
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002074940	A1	20020926	WO 2002-CA331	20020311
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1370643	A1	20031217	EP 2002-708064	20020311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002007527	A	20040225	BR 2002-7527	20020311
JP 2004520841	T2	20040715	JP 2002-574332	20020311
US 2002168764	A1	20021114	US 2002-97183	20020314
US 6808916	B2	20041026		
PRIORITY APPLN. INFO.:			US 2001-276734P P	20010316
			WO 2002-CA331 W	20020311

AB The present invention is directed to a method of extracting virus, particularly **reovirus**, from a culture of cells. Infectious virus can be extracted from the culture with a detergent at a convenient temperature such as 25° or 37° to **produce** high virus titers. Both ionic and non-ionic detergents can be used in the present invention.

IC ICM C12N007-00
ICS C12N007-02; A61K035-76
CC 9-9 (Biochemical Methods)
Section cross-reference(s): 10, 63
ST extg virus cell culture
IT Animal cell line
(L-929; method of extracting virus from cell culture)
IT Animal cell line
(Vero; method of extracting virus from cell culture)
IT Drug delivery systems
(carriers; method of extracting virus from cell culture)
IT Drugs
(excipient; method of extracting virus from cell culture)
IT Detergents
(ionic; method of extracting virus from cell culture)
IT Animal cell line
Animal tissue culture

Concentration (process)
Detergents
Extraction
Filtration
Human
Mammalia
Reoviridae
Suspensions
Temperature
Virus
(method of extracting virus from cell culture)

IT Detergents
(nonionic; method of extracting virus from cell culture)

IT 302-95-4, Sodium deoxycholate 9002-93-1, Triton X-100 9005-64-5, Tween 20 9016-45-9, NP-40
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(method of extracting virus from cell culture)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:123164 HCAPLUS
DOCUMENT NUMBER: 136:147504
TITLE: Method of **producing** infectious **reovirus**
INVENTOR(S): **Coffey, Matthew C.; Thompson, Bradley G.**
PATENT ASSIGNEE(S): Oncolytics Biotech, Inc., Can.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012435	A1	20020214	WO 2001-CA1054	20010720
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1309672	A1	20030514	EP 2001-953084	20010720
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001013122	A	20030722	BR 2001-13122	20010720
ZA 2003000410	A	20040126	ZA 2003-410	20010720
JP 2004505623	T2	20040226	JP 2002-517726	20010720
NZ 523510	A	20040827	NZ 2001-523510	20010720
US 2002037576	A1	20020328	US 2001-920012	20010802
US 6528305	B2	20030304		
US 2003166253	A1	20030904	US 2003-337911	20030108
US 6703232	B2	20040309		
US 2004126869	A1	20040701	US 2003-734552	20031211

PRIORITY APPLN. INFO.: US 2000-224026P P 20000810
WO 2001-CA1054 W 20010720
US 2001-920012 A1 20010802
US 2003-337911 A3 20030108

AB A simple and efficient method of **producing** mammalian **reovirus** is developed using HEK 293 cells. The method provides for fast **production** of **reovirus** in high yield. Furthermore, this method provides for a simpler purification procedure of the **produced reovirus.**

IC ICM C12N

CC 9-16 (Biochemical Methods)
Section cross-reference(s): 10, 63

ST infectious **reovirus**

IT Freezing
(-thawing; method of **producing** infectious **reovirus**)

IT Animal cell line
(Hek 293; method of **producing** infectious **reovirus**)

IT Reoviridae
(Infectious; method of **producing** infectious **reovirus**)

IT Drug delivery systems
(carriers; method of **producing** infectious **reovirus**)

IT Biological transport
(efflux; method of **producing** infectious **reovirus**)

IT Drugs
(excipient; method of **producing** infectious **reovirus**)

IT Laboratory ware
(flasks, Spinner; method of **producing** infectious **reovirus**)

IT Adhesion, biological
Animal tissue culture
Blood serum
Centrifugation
Composition
Culture media
Density
Freeze drying
Freezing
Human
Impellers
Infection
Mammalia
Reovirus 3
Storage
(method of **producing** infectious **reovirus**)

IT Humidity
(relative; method of **producing** infectious **reovirus**)

IT Animal tissue culture
(suspension; method of **producing** infectious **reovirus**)

IT 124-38-9, Carbon dioxide, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(method of **producing** infectious **reovirus**)

IT 56-85-9, L-Glutamine, biological studies 7647-17-8, Cesium chloride, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(method of **producing** infectious **reovirus**)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> analyze ct it l5
ENTER ANSWER NUMBER OR RANGE (1-):1-2
L6          ANALYZE L5 1-2 CT IT :     112 TERMS

=> d 1-30
L6          ANALYZE L5 1-2 CT IT :     112 TERMS

TERM #   # OCC  # DOC  % DOC CT IT
------ ------- ------ ------ ---------------
     1      20      2 100.00 METHOD
     2      20      2 100.00 OF
     3      13      1  50.00 INFECTIOUS
     4      13      1  50.00 REOVIRUS
     5      12      2 100.00 CELL
     6      12      2 100.00 CULTURE
     7      12      1  50.00 PRODUCING
     8       9      1  50.00 VIRUS
     9       8      1  50.00 EXTG
    10       8      1  50.00 FROM
    11       7      2 100.00 ANIMAL
    12       5      1  50.00 BIOLOGICAL
    13       4      2 100.00 ANIMAL CELL LINE
    14       4      2 100.00 LINE
    15       3      2 100.00 ANIMAL TISSUE CULTURE
    16       3      2 100.00 TISSUE
    17       3      1  50.00 DETERGENTS
    18       3      1  50.00 DETERGENTS
    19       3      1  50.00 STUDIES
    20       2      2 100.00 CARRIERS
    21       2      2 100.00 DELIVERY
    22       2      2 100.00 DRUG DELIVERY SYSTEMS
    23       2      2 100.00 DRUG
    24       2      2 100.00 DRUGS
    25       2      2 100.00 DRUGS
    26       2      2 100.00 EXCIPIENT
    27       2      2 100.00 HUMAN
    28       2      2 100.00 HUMAN
    29       2      2 100.00 L
    30       2      2 100.00 MAMMALIA
```

```
=> d que stat l14
L7            1 SEA FILE=HCAPLUS ABB=ON  ?INFECT?(3A)?REOVIRUS? AND (HEK? OR
                ?HUMAN?(W)?EMBRYO?(W)?KIDNEY?)(W)293
L8          486 SEA FILE=HCAPLUS ABB=ON  ?INFECT?(3A)?REOVIRUS?
L10           3 SEA FILE=HCAPLUS ABB=ON  L8 AND ?CULTUR?(4A)(?SUSPEN? OR
                ?FREEZ? OR ?LYOPHILIZ?)
L11           4 SEA FILE=HCAPLUS ABB=ON  L8 AND ?STORAG?
L12          62 SEA FILE=HCAPLUS ABB=ON  L8 AND (?PRODUC? OR ?PREPAR? OR
                ?EXTRACT?)(3A)(?REOVIRUS? OR ?VIRUS?)
L13           9 SEA FILE=HCAPLUS ABB=ON  L12 AND (?METHOD? OR ?TECHNIQ?)
L14          14 SEA FILE=HCAPLUS ABB=ON  L7 OR L10 OR L11 OR L13

=> d ibib abs l14 1-14

L14  ANSWER 1 OF 14  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:        2004:209395  HCAPLUS
DOCUMENT NUMBER:         140:405559
TITLE:                   Optimization of reovirus production from mouse L-929
                         cells in suspension culture
AUTHOR(S):               Jung, Sunghoon; Behie, Leo A.; Lee, Patrick W. K.;
                         Farrell, Patrick J.
CORPORATE SOURCE:        Department of Chemical Engineering (Pharmaceutical
                         Production Research Facility), University of Calgary,
                         Calgary, AB, T2N 1N4, Can.
SOURCE:                  Biotechnology and Bioengineering (2004), 85(7),
                         750-760
                         CODEN: BIBIAU; ISSN: 0006-3592
PUBLISHER:               John Wiley & Sons, Inc.
DOCUMENT TYPE:           Journal
LANGUAGE:                English
AB   Reovirus serotype 3 Dearing (T3D) has shown potential as a novel cancer
     therapy. To support the increasing demand for reovirus, a two-stage
     perfusion mode scheme is proposed for cell growth and reovirus production
     Mouse L-929 cells were used as the host for reovirus
     infection due to their ability to grow well in suspension
     culture. Several L-929 cell growth and reovirus
     infection characteristics were investigated and optimized in
     spinner flask batch cultures. For the growth of L-929 cells, a balanced
     nutrient-fortification of SMEM medium increased the maximum cell d. by 30%,
     compared to normal SMEM; however, ammonia and lactate accumulations were
     found to inhibit further cell growth. For the production of reovirus,
     .apprx.90% increase in viral yield resulted when the infection temperature was
     reduced from 37 to 33°C. Infectious reovirus
     particles were shown to be stable in conditioned medium at 37 and
     33°C. The final virus titer was dependent on the multiplicity of
     infection (MOI) and the host cell d. at the time of infection. A
     combination of an MOI of 0.1 pfu/cell and an initial host cell d. of 1.0
     + 106 cells/mL in fortified medium resulted in a maximum virus titer of
     (4.59 ± 0.16) + 109 pfu/mL and a specific yield of (2.34 ±
     0.08) + 103 pfu/cell. At an optimal harvest time of the infection
     process, 99% of the virus was associated with the cellular debris. Finally,
     the presence of 5.0 mM ammonia in the culture medium was shown to
     seriously inhibit the reovirus yield, whereas lactate concns. up to 20 mM
     had no effect.
REFERENCE COUNT:         32    THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14  ANSWER 2 OF 14  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:        2002:931124  HCAPLUS
DOCUMENT NUMBER:         138:203342
```

TITLE: Characterization of monoclonal antibodies against avian reovirus S1133 protein σA synthesized in Escherichia coli
AUTHOR(S): Pai, Wan Chain; Shien, Jui Huang; Liu, Hung Jen; Lee, Long Huw
CORPORATE SOURCE: College of Veterinary Medicine, Department of Veterinary Medicine, National Chung Hsing University, Taichung, 403, Taiwan
SOURCE: Veterinary Microbiology (2003), 91(4), 309-323
CODEN: VMICDQ; ISSN: 0378-1135
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Monoclonal antibodies (MAbs) were **prepared** against avian **reovirus** S1133 protein σA (eσA) synthesized in Escherichia coli. MAbs were characterized and used to develop a diagnostic test. Ten MAbs were selected for competitive binding assay following coupling with horseradish peroxidase. The results indicated that these MAbs delineated two epitopes I and II of eσA. An immuno-dot binding assay was used to detect the effect of denaturation on antibody recognition of the epitopes. All MAbs bound to eσA in its native form. After denaturation by boiling in SDS and 2-mercaptoethanol, the binding of MAbs recognizing epitope I was fully abolished. However, the reactivity of MAbs recognizing epitope II was not affected. MAbs 31 and 32, recognizing epitopes I and II, resp., were selected for the cross-reactivity to heterologous reovirus strains. The results suggest that the two epitopes are highly conserved among these virus strains. A MAb capture ELISA procedure was developed using MAbs 32 and 31 to detect reovirus protein σA in samples from tendon tissues of infected bird and chicken embryo fibroblast (CEF) cell cultures. Avian reovirus σA antigens in tendon specimens were detected from the inoculated birds as early as 2 days post-inoculation (PI), approximated a peak at 7 days PI, and maintained this until 16 days PI, then decreased gradually. A clear difference in absorbance values between the tendon samples of the avian **reovirus**- and mock-**infected** birds is obtained. Pos. results were also obtained from avian **reovirus**-**infected** CEF and from the tendon tissues of naturally infected broilers. These results indicated that the MAb capture ELISA is a useful **methods** for the detection of avian reovirus from chickens suspected to have avian **reovirus infections.**

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:123164 HCAPLUS
DOCUMENT NUMBER: 136:147504
TITLE: **Method** of **producing infectious reovirus**
INVENTOR(S): Coffey, Matthew C.; Thompson, Bradley G.
PATENT ASSIGNEE(S): Oncolytics Biotech, Inc., Can.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012435	A1	20020214	WO 2001-CA1054	20010720

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1309672	A1	20030514	EP 2001-953084		20010720
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
BR 2001013122	A	20030722	BR 2001-13122		20010720
ZA 2003000410	A	20040126	ZA 2003-410		20010720
JP 2004505623	T2	20040226	JP 2002-517726		20010720
NZ 523510	A	20040827	NZ 2001-523510		20010720
US 2002037576	A1	20020328	US 2001-920012		20010802
US 6528305	B2	20030304			
US 2003166253	A1	20030904	US 2003-337911		20030108
US 6703232	B2	20040309			
US 2004126869	A1	20040701	US 2003-734552		20031211
PRIORITY APPLN. INFO.:			US 2000-224026P	P	20000810
			WO 2001-CA1054	W	20010720
			US 2001-920012	A1	20010802
			US 2003-337911	A3	20030108

AB A simple and efficient **method** of **producing** mammalian **reovirus** is developed using **HEK 293** cells. The **method** provides for fast **production** of **reovirus** in high yield. Furthermore, this **method** provides for a simpler purification procedure of the **produced reovirus.**

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:526478 HCAPLUS
DOCUMENT NUMBER: 136:161896
TITLE: Reovirus reverse genetics: incorporation of the CAT gene into the reovirus genome
AUTHOR(S): Roner, Michael R.; Joklik, Wolfgang K.
CORPORATE SOURCE: Department of Biological Sciences, Center for Molecular Biology and Biotechnology, Department of Biomedical Sciences, Florida Atlantic University, Boca Raton, FL, 33431, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2001), 98(14), 8036-8041 CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The **infectious reovirus** RNA system was modified so as to generate a reovirus reverse genetics system. The system consists of (i) the plus strands of nine wild-type reovirus genome segments; (ii) transcripts of the genetically modified cDNA form of the tenth genome segment; and (iii) a cell line transformed so as to express the protein normally encoded by the tenth genome segment. In the work described here, a serotype 3 reovirus was generated into the S2 double-stranded RNA genome segment of which the CAT gene has been cloned. The virus is stable, replicates in cells that have been transformed (so as to express the S2 gene product, protein σ2), and expresses high levels of CAT

activity. This technol. can be extended to members of the orbivirus and rotavirus genera. This technol. provides a powerful system for basic studies of double-stranded RNA virus replication; a nonpathogenic viral vector that replicates to high titers and could be used for clin. applications; and a system for providing nonselectable viral variants (the result of mutations, insertions, and deletions) that could be valuable for the construction of viral vaccine strains against human and animal pathogens.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:378262 HCAPLUS
DOCUMENT NUMBER: 132:352765
TITLE: Preparation of infectious bursal disease virus and avian reovirus using avian LMH or other cell lines
INVENTOR(S): Ezoe, Shinsuke; Kawaguchi, Tokuichi; Ginnaga, Akihiro; Kitagawa, Gomoyuki; Fujikawa, Hiteo
PATENT ASSIGNEE(S): Juridical Foundation the Chemo-Sero-Therapeutic Research Institute, Japan
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 13 pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1202378	A	19981223	CN 1998-115151	19980602
JP 10327855	A2	19981215	JP 1997-160517	19970602
JP 11075833	A2	19990323	JP 1998-193681	19980623
PRIORITY APPLN. INFO.:			JP 1997-160517 A	19970602
			JP 1997-183121 A	19970623

AB Infectious bursal disease virus and avian reovirus using cell lines selected from avian LMH cell or CHCC-OU2 cell, anthropoid Vero cell, hamster HmLu-1 cell or BHK-21 cell. The virus for vaccine is selected from ILTV-CE, HVT-YT- 7, NDV-B1, IBV-Nerima, and EDSV-KE80. The vaccine is prepared by conventional **method**, and used for prevention of avian infectious disease induced by avian reovirus.

L14 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:245306 HCAPLUS
DOCUMENT NUMBER: 126:327602
TITLE: Permeabilization of mammalian cells to proteins: poliovirus 2Apro as a probe to analyze entry of proteins into cells
AUTHOR(S): Novoa, Isabel; Benavente, Javier; Cotten, Matt; Carrasco, Luis
CORPORATE SOURCE: Centro Biologia Molecular, Universidad Autonoma Madrid, Madrid, 28049, Spain
SOURCE: Experimental Cell Research (1997), 232(1), 186-190 CODEN: ECREAL; ISSN: 0014-4827
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Two hybrid protein mols. containing the poliovirus protease 2A (MBP-2Apro) (maltose-binding protein-2Apro and MBP-Pseudomonas exotoxin A-2Apro) were constructed and purified. Both hybrid proteins efficiently cleave the translation initiation factor eIF-4G when they are co-internalized into

cells with adenovirus particles. Almost no intact eIF-4G can be detected in cells incubated with these proteins following this **method.** **Reovirus infectious** subviral particles also promote the delivery of MBP-2Apro into cells, although less efficiently than adenovirus particles. None of the other **methods** employed to permeabilize cells to MBP-2Apro achieves the degree of eIF-4G cleavage observed with adenovirus particles. By comparison about 30% of cells electroporated with MBP-2Apro still contain intact eIF-4G. More drastic electroporation conditions lead to a significant decrease of cell survival. Osmotic lysis of pinocytic vesicles resulted in 30% of the eIF-4G being cleaved in cells treated in suspension. Delivery of MBP-2Apro by pH-sensitive liposomes leads to poor hydrolysis of eIF-4G. Taken together our results indicate that permeabilization of cells with adenovirus particles is the most efficient **method** for introducing MBP-2Apro into cells.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:614419 HCAPLUS
DOCUMENT NUMBER: 125:270744
TITLE: Effect of protectants in L-drying on the conformation and **infectivity** of rice dwarf **phytoreovirus**
AUTHOR(S): Fukumoto, F.; Omura, T.; Kimura, I.
CORPORATE SOURCE: Ornamental Plants and Tea, National Research Inst. of Vegetables, Japan
SOURCE: Archives of Virology (1996), 141(8), 1579-1585
CODEN: ARVIDF; ISSN: 0304-8608
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Purified rice dwarf phytoreovirus prepns., after rehydration following drying without freezing (L-drying) and sucrose d. gradient centrifugation, sedimented to the same position as untreated controls. Upon **storage** at 65°C, virion conformation in L-dried prepns. supplemented with 1% sucrose was maintained better than without additives. Moreover, during **storage** for 6 yr at -70°C, infectivity of L-dried prepns. from crude exts. of infected rice plants containing 5% sucrose was higher than controls based on the number of count of infected foci on cell monolayers and transmission to rice seedlings by leafhopper of the vector Nephotettix cincticeps, which had been injected with such exts.

L14 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:18769 HCAPLUS
DOCUMENT NUMBER: 118:18769
TITLE: Coating and storing enzyme-linked immunosorbent assay plates used for analysis of avian pathogens to give a long shelf-life
AUTHOR(S): Roberts, B.; Howes, K.
CORPORATE SOURCE: Inst. Anim. Health, Houghton Lab., Houghton/Huntingdon/Cambs, PE17 2DA, UK
SOURCE: Food and Agricultural Immunology (1992), 4(2), 103-12
CODEN: FAIMEZ; ISSN: 0954-0105
DOCUMENT TYPE: Journal
LANGUAGE: English
AB ELISAs were developed for the detection of antibodies to Mycoplasma synoviae, Pasteurella multocida, **reovirus**, **infectious** bursal disease virus (IBDV), infectious bronchitis virus (IBV), and

egg-drop syndrome (ES). Purified antigenic prepns. derived from the various pathogens were used to coat microtiter plates and their shelf-life was determined There was no significant difference in ELISA absorbance values determined on paired antigen coated microtiter plates stored at -20° and at room temperature, desiccated, for 63 days. When stored at 4°, desiccated, antigen coated plates had a shelf-life of up to 390 days. A linear relationship was established between the two sets of values with correlation coeffs. ranging from 0.796 to 0.993.

L14 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:4488 HCAPLUS
DOCUMENT NUMBER: 116:4488
TITLE: Thymic atrophy in type 2 **reovirus** **infected** mice: immunosuppression and effects of thymic hormone. Thymic atrophy caused by reo-2
AUTHOR(S): Onodera, Takashi; Taniguchi, Toshiaki; Tsuda, Tomoyuki; Yoshihara, Kazuhiro; Shimizu, Shinya; Sato, Masumi; Awaya, Akira; Hayashi, Toshiharu
CORPORATE SOURCE: Natl. Inst. Anim. Health, Kannondai, Tsukuba, Japan
SOURCE: Thymus (1991), 18(2), 95-109
CODEN: THYMDB; ISSN: 0165-6090
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Suckling mice **infected** with **reovirus** type 2 showed a thymic atrophy followed by a marked suppression of the antibody, production to SRBC (a T cell dependent antigen) and bacterial LPS, when measured by the splenic PFC assay. The PFCs produced were sometimes less than 1% of uninfected control animals. Histol. the thymus was usually smaller than normal, and atrophy of the cortex and increased number of Hassal's bodies were observed Number of nucleated cells in the thymus of infected mice showed 90% decrease as compared to uninfected mice. The spleen, although larger in size, showed depletion of lymphocytes from the thymus-dependent and follicular areas. No viral replication was detected in lymphatic organs using virol. **methods.** Virus-infected mice transferred with the splenocytes or thymocytes from age-matched uninfected mice restored the antibody production against SRBC to normal levels. Thymocytes were more efficient than splenocytes in enhancing the antibody **production** in **virus**-infected mice. Injection of several different kinds of immunopotentiating agents enhanced the antibody production to SRBC, although LPS exacerbated the unresponsiveness. Thymic hormones such as serum thymic factor (FTS) and thymopentin (TP5) enhanced antibody production to SRBC and LPS more efficiently than muramyl dipeptide (MDP). Flow cytometric anal. showed that percentage of CD4+ single pos. cells was slightly increased in virus-infected mice treated with FTS, while there was no difference in the phenotypic distributions of thymocyte subpopulations among virus-infected mice, FTS-untreated and FTS-treated normal mice.

L14 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:72242 HCAPLUS
DOCUMENT NUMBER: 110:72242
TITLE: Identification of the σ1S protein in **reovirus** serotype 2-**infected** cells with antibody prepared against a bacterial fusion protein
AUTHOR(S): Cashdollar, L. William; Blair, Patricia; Van Dyne, Susan
CORPORATE SOURCE: Dep. Microbiol., Med. Coll. Wisconsin, Milwaukee, WI, 53226, USA
SOURCE: Virology (1989), 168(1), 183-6
CODEN: VIRLAX; ISSN: 0042-6822

DOCUMENT TYPE: Journal
LANGUAGE: English
AB A bacterial expression vector, pATH3, was used to produce high levels of a fusion protein composed of a portion of the trpE protein of Escherichia coli and the putative σ1S coding region from the S1 gene of reovirus serotype 2. The fusion protein was purified and injected into rabbits to prepare antisera. This antibody was able to detect σ1S being synthesized in L929 cells **infected** with **reovirus** serotype 2 by means of immunopptn. and immunoblotting **techniques**. The peak of σ1S accumulation in type 2-infected cells occurred .apprx.20 h after infection. This report represents the first description of σ1S **production** in **reovirus** serotype 2-**infected** cells.

L14 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:487149 HCAPLUS
DOCUMENT NUMBER: 109:87149
TITLE: Avian reovirus mRNAs are nonfunctional in infected mouse cells: translational basis for virus host-range restriction
AUTHOR(S): Benavente, Javier; Shatkin, Aaron J.
CORPORATE SOURCE: Cent. Adv. Biotechnol. Med., Piscataway, NJ, 08855-0759, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1988), 85(12), 4257-61
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Avian reovirus S1133 penetrates and uncoats in **suspension cultures** of mouse L cells. The multiple species of viral transcripts are produced in the cytoplasm of the infected cell, but they fail to associate with polysomes, consistent with the absence of viral protein synthesis. The selective block in avian virus mRNA translation is not overcome by **coinfection** with mammalian **reovirus** type 3, which replicates in mouse L cells, or by hypertonic shock or exposure to a low concentration of cycloheximide. Although the avian viral transcripts are inactive in vivo, RNA extracted from infected, nonpermissive L cells directs the synthesis of a normal spectrum of viral proteins in rabbit reticulocyte lysates. These results indicate that avian viral transcription is not restricted in mouse cells and that viral replication is prevented at the level of initiation of protein synthesis.

L14 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1984:608874 HCAPLUS
DOCUMENT NUMBER: 101:208874
TITLE: Mechanism of interferon action. Increased phosphorylation of protein synthesis initiation factor eIF-2α in interferon-treated, **reovirus**-**infected** mouse L929 fibroblasts in vitro- and in vivo
AUTHOR(S): Samuel, Charles E.; Duncan, Roger; Knutson, Grace S.; Hershey, John W. B.
CORPORATE SOURCE: Dep. Biol. Sci., Univ. California, Santa Barbara, CA, 93106, USA
SOURCE: Journal of Biological Chemistry (1984), 259(21), 13451-7
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effect of interferon (IFN) treatment and virus infection on the

phosphorylation both in vitro and in vivo of the α subunit of protein synthesis initiation factor eIF-2 (eIF-2α) was examined in mouse fibroblast L929 cells. The [γ-32P]ATP-mediated in vitro phosphorylation of eIF-2α catalyzed by cell-free exts. prepared from IFN-treated, uninfected cells was dependent upon exogenously added double-stranded RNA (dsRNA). However, the dsRNA requirement for eIF-2α phosphorylation in vitro was eliminated by prior **infection** of cells with **reovirus** Dearing strain virions but not with defective top component particles. The enhanced phosphorylation in vitro of eIF-2α and ribosome-associated protein P1 depended in a similar manner upon the multiplicity of virus infection. The extent of phosphorylation in vivo of eIF-2α prepared from L929 cells was also examined by utilizing 2-dimensional isoelec. focusing/SDS-polyacrylamide gel electrophoresis and immunoblotting **techniques.** About 5-10% of the eIF-2α was typically phosphorylated in vivo in untreated, mock-infected cells, whereas 25-30% was phosphorylated in IFN-treated, **reovirus-infected** cells. An intermediate extent of eIF-2α phosphorylation, routinely between 15 and 20%, was observed with either IFN treatment or **reovirus infection** alone. The integrity of eIF-4A and eIF-4B was also examined by 2-dimensional electrophoresis and immunoblotting, and no alterations in mol. size or charge heterogeneity were detected when these factors were **prepared** from IFN-treated, **reovirus-infected** cells as compared to untreated, uninfected cells.

L14 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1984:99719 HCAPLUS
DOCUMENT NUMBER: 100:99719
TITLE: Studies on interferon induction and interferon sensitivity of avian reoviruses
AUTHOR(S): Ellis, M. N.; Eidson, C. S.; Brown, J.; Kleven, S. H.
CORPORATE SOURCE: Coll. Vet. Med., Univ. Georgia, Athens, GA, 30605, USA
SOURCE: Avian Diseases (1983), 27(4), 927-36
CODEN: AVDIAI; ISSN: 0005-2086
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Four strains of avian reovirus were ineffective inducers of interferon (IFN) in chicken kidney (CK) cell cultures. All strains were similar in single-cycle replication curves. At multiplicities of infection of 0.20 and 10 plaque-forming units per cell, IFN was not induced in CK cells. **Reovirus** did not **produce** an IFN blocker in CK cells. Attenuated reovirus did induce IFN in aged chicken embryo fibroblast (CEF) cell cultures. By priming cells with a low dose of IFN before **infection** with **reovirus**, IFN formation by CEF could be enhanced. UV-inactivated avian reovirus was an effective inducer of IFN in both CK and CEK cell cultures. The sensitivity of avian reoviruses (Fahey-Crawley, Reo-25, S-1133, Reo-V) to chicken interferon (Ch-IFN) was studied by the plaque-reduction **method.** Avian reoviruses were less sensitive to Ch-IFN than was vesicular stomatitis virus or Semliki Forest virus and appeared to be as resistant to IFN as Newcastle disease virus.

L14 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1973:69061 HCAPLUS
DOCUMENT NUMBER: 78:69061
TITLE: Characterization of a viral messenger ribonucleoprotein particle accumulated during inhibition of polypeptide chain initiation in **reovirus-infected** L cells
AUTHOR(S): Christman, Judith K.; Reiss, Betti; Kyner, David;

Levin, Daniel H.; Klett, Hanna; Acs, George
CORPORATE SOURCE: Inst. Muscle Dis., Inc., New York, NY, USA
SOURCE: Biochimica et Biophysica Acta (1973), 294(1), 153-64
CODEN: BBACAQ; ISSN: 0006-3002
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A prior study has shown that L cells deprived of essential amino acids in isotonic Tris-buffered KCl show a marked and rapid inhibition of protein synthesis due to a decrease in the rate of initiation of new peptide chains. The inhibition, manifested by a disaggregation of polysomes with apparent conservation of messenger RNA (mRNA), is rapidly reversed when the cells are resuspended in complete growth medium. This phenomenon was applied in studies on the mechanism of mRNA **storage** and reutilization in **reovirus-infected** L cells. When **reovirus-infected** L cells are incubated in KCl-Tris medium, the viral messengers accumulate as ribonucleoprotein particles which sediment at .apprx.50 S in sucrose density gradients and have a density in CsCl of 1.40. These 50-S messenger-containing ribonucleoprotein particles do not appear to be complexed with ribosomal subunits. The particles contain all 10 species of viral mRNA and have no demonstrable viral proteins. The mRNA from these particles is readily and rapidly mobilized into functional polysomes when the infected cells are restored to normal growth medium. Moreover, the mRNA moiety of partially purified 50-S ribonucleoprotein particles can direct the incorporation of amino acids into protein in a cell-free system.

```
=> d que stat l16
L7            1 SEA FILE=HCAPLUS ABB=ON  ?INFECT?(3A)?REOVIRUS? AND (HEK? OR
                ?HUMAN?(W)?EMBRYO?(W)?KIDNEY?)(W)293
L8          486 SEA FILE=HCAPLUS ABB=ON  ?INFECT?(3A)?REOVIRUS?
L10           3 SEA FILE=HCAPLUS ABB=ON  L8 AND ?CULTUR?(4A)(?SUSPEN? OR
                ?FREEZ? OR ?LYOPHILIZ?)
L11           4 SEA FILE=HCAPLUS ABB=ON  L8 AND ?STORAG?
L12          62 SEA FILE=HCAPLUS ABB=ON  L8 AND (?PRODUC? OR ?PREPAR? OR
                ?EXTRACT?)(3A)(?REOVIRUS? OR ?VIRUS?)
L13           9 SEA FILE=HCAPLUS ABB=ON  L12 AND (?METHOD? OR ?TECHNIQ?)
L14          14 SEA FILE=HCAPLUS ABB=ON  L7 OR L10 OR L11 OR L13
L15          53 SEA L14
L16          30 DUP REMOV L15 (23 DUPLICATES REMOVED)

=> d ibib abs l16 1-30

L16  ANSWER 1 OF 30     MEDLINE on STN                    DUPLICATE 1
ACCESSION NUMBER:   2004100012     MEDLINE
DOCUMENT NUMBER:    PubMed ID: 14991653
TITLE:              Optimization of reovirus production
                    from mouse L-929 cells in suspension
                    culture.
AUTHOR:             Jung Sunghoon; Behie Leo A; Lee Patrick W K; Farrell
                    Patrick J
CORPORATE SOURCE:   Department of Chemical Engineering, Pharmaceutical
                    Production Research Facility, University of Calgary,
                    Calgary, Alberta T2N 1N4, Canada.
SOURCE:             Biotechnology and bioengineering, (2004 Mar 30) 85 (7)
                    750-60.
                    Journal code: 7502021. ISSN: 0006-3592.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      (EVALUATION STUDIES)
                    Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200410
ENTRY DATE:         Entered STN: 20040302
                    Last Updated on STN: 20041015
                    Entered Medline: 20041014
```

AB Reovirus serotype 3 Dearing (T3D) has shown potential as a novel cancer therapy. To support the increasing demand for reovirus, a two-stage perfusion mode scheme is proposed for cell growth and **reovirus production.** Mouse L-929 cells were used as the host for **reovirus infection** due to their ability to grow well in **suspension culture.** Several L-929 cell growth and **reovirus infection** characteristics were investigated and optimized in spinner flask batch cultures. For the growth of L-929 cells, a balanced nutrient-fortification of SMEM medium increased the maximum cell density by 30%, compared to normal SMEM; however, ammonia and lactate accumulations were found to inhibit further cell growth. For the **production** of **reovirus**, approximately 90% increase in viral yield resulted when the infection temperature was reduced from 37 to 33 degrees C. **Infectious reovirus** particles were shown to be stable in conditioned medium at 37 and 33 degrees C. The final virus titer was dependent on the multiplicity of infection (MOI) and the host cell density at the time of infection. A combination of an MOI of 0.1 pfu/cell and an initial host cell density of 1.0 x 10(6) cells/mL in fortified medium resulted in a maximum virus titer of (4.59 +/- 0.16) x 10(9) pfu/mL and a specific yield of (2.34 +/- 0.08) x 10(3) pfu/cell. At an optimal harvest time of the infection process, 99% of the virus was

associated with the cellular debris. Finally, the presence of 5.0 mM ammonia in the culture medium was shown to seriously inhibit the reovirus yield, whereas lactate concentrations up to 20 mM had no effect.

L16 ANSWER 2 OF 30 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2004155273 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15046956
TITLE: Antibody responses against avian reovirus nonstructural protein sigmaNS in experimentally virus-infected chickens monitored by a monoclonal antibody capture enzyme-linked immunosorbent assay.
AUTHOR: Chen Pao Nan; Liu Hung Jen; Shien Jui Huang; Lee Long Huw
CORPORATE SOURCE: Department of Veterinary Medicine, College of Veterinary Medicine, National Chung Hsing University, 250 Kuo Kuang Road, Taichung 403, Taiwan.
SOURCE: Research in veterinary science, (2004 Jun) 76 (3) 219-25. Journal code: 0401300. ISSN: 0034-5288.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200406
ENTRY DATE: Entered STN: 20040330
Last Updated on STN: 20040616
Entered Medline: 20040615

AB Crude antigen **preparations** from avian **reovirus** (ARV)-**infected** chicken embryo fibroblasts (sigmaNS) or from bacterially expressed protein sigmaNS (esigmaNS) were captured by monoclonal antibody 1E1(MAb 1E1) against ARV nonstructural protein sigmaNS immobilized on the ELISA plates and were used as the MAb capture ELISA for antibody detection. Sixty one-week-old specific pathogenic free (SPF) chickens were divided into six groups and were vaccinated with live or inactivated ARV vaccine preparations in different combinations or inoculated with a virulent ARV strain. Sera collected from the birds were tested for their antibody responses to ARV nonstructural protein sigmaNS. Using the MAb capture ELISAs, the level of nonspecific binding reactions was tested on the serum samples obtained weekly from mock-infected SPF chickens from 1 to 25 weeks and compared to the results tested by the conventional ELISA. The results indicated that both MAb capture ELISAs had lower nonspecific bindings than those in the conventional ELISA, even in older birds. Antibody responses against ARV sigmaNS of the birds which received the inactivated vaccine twice (group I), inactivated vaccine followed by a live vaccine (group II), or a live vaccine followed by boosting with an inactivated vaccine (group III) were detected by MAb captured ELISA with sigmaNS crude antigens. The absorbance values increased rapidly at 1-2 weeks after boosting, approximated a peak at 5-6 weeks of age, and maintained this throughout the length of the experiment. The absorbance values of the MAb capture ELISA showed a good correlation to the SN titers (r value > 0.85). On the other hand, serum samples from the birds which received the live vaccine twice (group IV) or were inoculated with a virulent ARV (group V) did not show antibody responses to sigmaNS, similar to those from the mock-infected birds (group VI), as the absorbance values maintained at a low level (below 0.5) throughout the length of the experiment. Similar results were obtained in the sera detected by MAb capture ELISA with crude esigmaNS antigens, except that the absorbance values in the sera from the birds in group III were gradually increased and later approximated a peak at 11 weeks of age and maintained this throughout the length of the experiments. The results suggest that MAb capture ELISAs can be readily used to detect antibody responses of the

birds against ARV nonstructural protein sigmaNS which may reflect an immune status of a chicken flock, receiving ARV vaccine as long as including an inactivated vaccine.

L16 ANSWER 3 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2003:291665 BIOSIS
DOCUMENT NUMBER: PREV200300291665
TITLE: Immortal cell line derived from grouper Epinephelus coioides and its applications therein.
AUTHOR(S): Chi, Shau-Chi [Inventor, Reprint Author]
CORPORATE SOURCE: 557 No. 12, Chien-Shan Road, Section 1, Chu-Shan, Nan-Tou Hsien, Taiwan
ASSIGNEE: National Science Council, Nan-Tou Hsien, Taiwan
PATENT INFORMATION: US 6566117 May 20, 2003
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (May 20 2003) Vol. 1270, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 19 Jun 2003
Last Updated on STN: 19 Jun 2003

AB The present invention describes (1) an immortal cell line derived from grouper and a **method** for establishing the cell line; (2) **methods** for mass **producing** and purifying aquatic **viruses** using the immortal cell line from grouper; (3) an anti-NNV antibody and a **method** for producing the anti-NNV antibody; and (4) a vaccine of NNV and a **method** for protecting fish against NNV infection. The present immortal cell line is derived from the grouper and is susceptible to the viral families of Birnaviridae such as Infectious Pancreatic Necrosis Virus (IPNV); Herpesviridae such as Eel Herpes Virus Formosa (EHVF); Reoviridae such as Hard Clam Reovirus (HCRV); and Nodaviridae such as Nervous Necrosis Virus (NNV).

L16 ANSWER 4 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2003:172899 BIOSIS
DOCUMENT NUMBER: PREV200300172899
TITLE: **Method** of **producing infectious reovirus.**
AUTHOR(S): Thompson, Bradley G. [Inventor, Reprint Author]; Coffey, Matthew C. [Inventor]
CORPORATE SOURCE: Clagary, Canada
ASSIGNEE: Oncolytics Biotech, Inc., Calgary, Canada
PATENT INFORMATION: US 6528305 March 04, 2003
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Mar 4 2003) Vol. 1268, No. 1. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 2 Apr 2003
Last Updated on STN: 2 Apr 2003

AB A simple and efficient **method** of **producing** mammalian **reovirus** is developed using **HEK 293** cells. The **method** provides for fast **production** of **reovirus** in high yield. Furthermore, this **method** provides for a simpler purification procedure of the **produced reovirus.**

L16 ANSWER 5 OF 30 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 2002716436 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12477645
TITLE: Characterization of monoclonal antibodies against avian reovirus S1133 protein sigmaA synthesized in Escherichia coli.
AUTHOR: Pai Wan Chain; Shien Jui Huang; Liu Hung Jen; Lee Long Huw
CORPORATE SOURCE: Department of Veterinary Medicine, College of Veterinary Medicine, National Chung Hsing University, Taichung 403, Taiwan.
SOURCE: Veterinary microbiology, (2003 Feb 25) 91 (4) 309-23. Journal code: 7705469. ISSN: 0378-1135.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200303
ENTRY DATE: Entered STN: 20021217
Last Updated on STN: 20030314
Entered Medline: 20030313

AB Monoclonal antibodies (MAbs) were **prepared** against avian **reovirus** S1133 protein sigmaA (esigmaA) synthesized in Escherichia coli. MAbs were characterized and used to develop a diagnostic test. Ten MAbs were selected for competitive binding assay following coupling with horseradish peroxidase. The results indicated that these MAbs delineated two epitopes I and II of esigmaA. An immuno-dot binding assay was used to detect the effect of denaturation on antibody recognition of the epitopes. All MAbs bound to esigmaA in its native form. After denaturation by boiling in SDS and 2-mercaptoethanol, the binding of MAbs recognizing epitope I was fully abolished. However, the reactivity of MAbs recognizing epitope II was not affected. MAbs 31 and 32, recognizing epitopes I and II, respectively, were selected for the cross-reactivity to heterologous reovirus strains. The results suggest that the two epitopes are highly conserved among these virus strains. A MAb capture enzyme-linked immunosorbent assay (ELISA) procedure was developed using MAbs 32 and 31 to detect reovirus protein sigmaA in samples from tendon tissues of infected bird and chicken embryo fibroblast (CEF) cell cultures. Avian reovirus sigmaA antigens in tendon specimens were detected from the inoculated birds as early as 2 days post-inoculation (PI), approximated a peak at 7 days PI, and maintained this until 16 days PI, then decreased gradually. A clear difference in absorbance values between the tendon samples of the avian **reovirus**- and mock-**infected** birds is obtained. Positive results were also obtained from avian **reovirus-infected** CEF and from the tendon tissues of naturally infected broilers. These results indicated that the MAb capture ELISA is a useful **methods** for the detection of avian reovirus from chickens suspected to have avian **reovirus infections.**

L16 ANSWER 6 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2003:446 BIOSIS
DOCUMENT NUMBER: PREV200300000446
TITLE: Reovirus therapy of lymphoid malignancies.
AUTHOR(S): Alain, Tommy; Hirasawa, Kensuke; Pon, Kelly J.; Nishikawa, Sandra G.; Urbanski, Stefan J.; Auer, Yvonna; Luider, Joanne; Martin, Anita; Johnston, Randal N.; Janowska-Wieczorek, Anna; Lee, Patrick W. K.; Kossakowska, Anna E. [Reprint Author]

CORPORATE SOURCE: Dept of Pathology, Foothills Hospital, 1403 29th St NW, Calgary, AB, T2N 2T9, Canada
anna.kossakowska@cls.ab.ca
SOURCE: Blood, (December 1 2002) Vol. 100, No. 12, pp. 4146-4153. print.
CODEN: BLOOAW. ISSN: 0006-4971.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 18 Dec 2002
Last Updated on STN: 18 Dec 2002

AB **Reoviruses infect** cells that manifest an activated Ras-signaling pathway, and have been shown to effectively destroy many different types of neoplastic cells, including those derived from brain, breast, colon, ovaries, and prostate. In this study, we investigated the reovirus as a potential therapeutic agent against lymphoid malignancies. A total of 9 lymphoid cell lines and 27 primary human lymphoid malignancies, as well as normal lymphocytes and hematopoietic stem/progenitor cells, were tested for susceptibility to **reovirus infection.** For in vitro studies, the cells were challenged with reovirus (serotype 3 Dearing), and viral infection was assessed by cytopathic effects, viability, viral protein synthesis, and progeny **virus production.** We present evidence of efficient **reovirus infection** and cell lysis in the diffuse large B-cell lymphoma cell lines and Burkitt lymphoma cell lines Raji and CA46 but not Daudi, Ramos, or ST486. Moreover, when Raji and Daudi cell lines were grown subcutaneously in severe combined immunodeficient/nonobese diabetic (SCID/NOD) mice and subsequently injected with reovirus intratumorally or intravenously, significant regression was observed in the Raji-induced, but not the Daudi-induced, tumors, which is consistent with the in vitro results. Susceptibility to **reovirus infection** was also detected in 21 of the 27 primary lymphoid neoplasias tested but not in the normal lymphocytes or hematopoietic stem/progenitor cells. Our results suggest that reovirus may be an effective agent against several types of human lymphoid malignancies.

L16 ANSWER 7 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2002:623078 BIOSIS
DOCUMENT NUMBER: PREV200200623078
TITLE: Structural and functional differences between putative mucosal inductive sites of the rat.
AUTHOR(S): Zuercher, Adrian W.; Cebra, John J. [Reprint author]
CORPORATE SOURCE: Department of Biology, University of Pennsylvania, 415 S. University Avenue, Philadelphia, PA, 19104-6018, USA
jcebra@sas.upenn.edu
SOURCE: European Journal of Immunology, (November, 2002) Vol. 32, No. 11, pp. 3191-3196. print.
CODEN: EJIMAF. ISSN: 0014-2980.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 12 Dec 2002
Last Updated on STN: 12 Dec 2002

AB Nasal-associated lymphoid tissue (NALT), bronchus-associated lymphoid tissue (BALT) and Peyer's patches (PP) were compared structurally and functionally using a model of local mucosal **infection** of rats with **reovirus.** Histological analyses showed that BALT lacks the typical lymphoid organization found in NALT and PP. After local **reovirus infection**, germinal centers developed in NALT with appearance of IgA+ cells, whereas no germinal centers or isotype-switched cells were found in BALT. **Production** of

reovirus-specific IgA was observed in NALT and PP, but only small amounts of specific IgA were secreted by BALT. Both NALT and BALT showed considerable production of IgG2b, whereas this isotype was poorly produced by PP. These data reveal profound qualitative differences between these three mucosal sites, and strongly suggest that BALT is not a mucosal inductive site for reovirus-specific immune responses in the rat.

L16 ANSWER 8 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2002:250360 BIOSIS
DOCUMENT NUMBER: PREV200200250360
TITLE: Oncolytic reovirus against ovarian and colon cancer.
AUTHOR(S): Hirasawa, Kensuke; Nishikawa, Sandra G.; Norman, Kara L.; Alain, Tommy; Kossakowska, Anna; Lee, Patrick W. K. [Reprint author]
CORPORATE SOURCE: Department of Microbiology and Infectious Diseases, University of Calgary Health Sciences Center, Calgary, Alberta, T2N 4N1, Canada
plee@ucalgary.ca
SOURCE: Cancer Research, (March 15, 2002) Vol. 62, No. 6, pp. 1696-1701. print.
CODEN: CNREA8. ISSN: 0008-5472.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Apr 2002
Last Updated on STN: 24 Apr 2002

AB Reovirus selectively replicates in and destroys cancer cells with an activated Ras signaling pathway. In this study, we evaluated the feasibility of using reovirus (serotype 3, strain Dearing) as an antihuman colon and ovarian cancer agent. In in vitro studies, **reovirus infection** in human colon and ovarian cell lines was assessed by cytopathic effect as detected by light microscopy, (35S)Methionine labeling of infected cells for viral protein synthesis and progeny **virus production** by plaque assay. We observed that **reovirus** efficiently **infected** all five human colon cancer cell lines (Caco-2, DLD-1, HCT-116, HT-29, and SW48) and four human ovarian cancer cell lines (MDAH2774, PA-1, SKOV3, and SW626) which were tested, but not a normal colon cell line (CCD-18Co) or a normal ovarian cell line (NOV-31). We also observed that the Ras activity in the human colon and ovarian cancer cell lines was elevated compared with that in normal colon and ovarian cell lines. In animal models, intraneoplastic as well as i.v. inoculation of reovirus resulted in significant regression of established s.c. human colon and ovarian tumors implanted at the hind flank. Histological studies revealed that **reovirus infection** in vivo was restricted to tumor cells, whereas the surrounding normal tissue remained uninfected. Additionally, in an i.p. human ovarian cancer xenograft model, inhibition of ascites tumor formation and the survival of animals treated with live reovirus was significantly greater than of control mice treated with UV-inactivated reovirus. **Reovirus infection** in ex vivo primary human ovarian tumor surgical samples was also confirmed, further demonstrating the potential of reovirus therapy. These results suggest that reovirus holds promise as a novel agent for human colon and ovarian cancer therapy.

L16 ANSWER 9 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2000:421517 BIOSIS
DOCUMENT NUMBER: PREV200000421517
TITLE: Reovirus-induced apoptosis is mediated by TRAIL.
AUTHOR(S): Clarke, Penny; Meintzer, Suzanne M.; Gibson, Spencer;

Widmann, Christian; Garrington, Timothy P.; Johnson, Gary L.; Tyler, Kenneth L. [Reprint author]
CORPORATE SOURCE: Department of Neurology (127), Denver VA Medical Center, 1066 Clermont St., Denver, CO, 80220, USA
SOURCE: Journal of Virology, (September, 2000) Vol. 74, No. 17, pp. 8135-8139. print.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Oct 2000
Last Updated on STN: 8 Jan 2002

AB Members of the tumor necrosis factor (TNF) receptor superfamily and their activating ligands transmit apoptotic signals in a variety of systems. We now show that the binding of TNF-related, apoptosis-inducing ligand (TRAIL) to its cellular receptors DR5 (TRAILR2) and DR4 (TRAILR1) mediates reovirus-induced apoptosis. Anti-TRAIL antibody and soluble TRAIL receptors block reovirus-induced apoptosis by preventing TRAIL-receptor binding. In addition, reovirus induces both TRAIL release and an increase in the expression of DR5 and DR4 in infected cells. Reovirus-induced apoptosis is also blocked following inhibition of the death receptor-associated, apoptosis-inducing molecules FADD (for FAS-associated death domain) and caspase 8. We propose that **reovirus infection** promotes apoptosis via the expression of DR5 and the release of TRAIL from infected cells. Virus-induced regulation of the TRAIL apoptotic pathway defines a novel mechanism for virus-induced apoptosis.

L16 ANSWER 10 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2000:372171 BIOSIS
DOCUMENT NUMBER: PREV200000372171
TITLE: The use of monoclonal antibody probes for the detection of avian reovirus antigens.
AUTHOR(S): Liu, Hung J. [Reprint author]; Giambrone, Joseph J.; Wu, Yeong H.; Liao, Ming H.; Lu, Che F.
CORPORATE SOURCE: Department of Veterinary Medicine, National Pingtung University of Science and Technology, Pingtung, Taiwan
SOURCE: Journal of Virological Methods, (May, 2000) Vol. 86, No. 2, pp. 115-119. print.
CODEN: JVMEDH. ISSN: 0166-0934.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 30 Aug 2000
Last Updated on STN: 8 Jan 2002

AB Two monoclonal antibodies (MAb), E9 and H3, **prepared** against avian **reovirus** (ARV) S1133, were used in an immuno-dot assay to detect ARV antigens from cell culture and from tendon tissue samples of chickens. The limit of viral antigens detected was 8 ng using both MAb probes. The probes detected 10 ARV isolates representing at least two serotypes or pathotypes. The results indicated that these probes had broad specificity. The probes, however, did not cross-react with viral antigens prepared from six unrelated avian viruses. The ARV antigens in tendon tissue samples were detected by both probes, and it is possible, therefore, to use either of the two MAb probes for detection of ARV infections.

L16 ANSWER 11 OF 30 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 1999201284 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10099508
TITLE: **Production** of **reovirus** type-1 and

type-3 from Vero cells grown on solid and macroporous microcarriers.
AUTHOR: Berry J M; Barnabe N; Coombs K M; Butler M
CORPORATE SOURCE: Department of Microbiology and Medical Microbiology, University of Manitoba, Winnipeg, Manitoba, Canada.
SOURCE: Biotechnology and bioengineering, (1999 Jan 5) 62 (1) 12-9. Journal code: 7502021. ISSN: 0006-3592.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199905
ENTRY DATE: Entered STN: 19990525
Last Updated on STN: 19990525
Entered Medline: 19990507

AB Two strains of reovirus were propagated in Vero cells grown in stationary or microcarriers cultures. Vero cells grown as monolayers on T-flasks or in spinner cultures of Cytodex-1 or Cultispher-G microcarriers could be **infected** with **reovirus** serotype 1, strain Lang (T1L), and serotype 3, strain Dearing (T3D). A regime of intermittent low speed stirring at reduced culture volume was critical to ensure viral infection of cells in microcarrier cultures. The virus titre increased by 3 to 4 orders of magnitude over a culture period of 150 h. Titres of the T3D reovirus strain were higher (43%) compared to those of the T1L strain in all cultures. Titres were significantly higher in T-flask and Cytodex-1 microcarrier cultures compared to Cultispher-G cultures with respect to either reovirus type. The viral productivity in the microcarrier cultures was dependent upon the multiplicity of infection (MOI) and the cell/bead ratio at the point of infection. A combination of high MOI (5 pfu/cell) and high cell/bead loading (>400 for Cytodex-1 and >1,000 for Cultispher-G) resulted in a low **virus productivity** per cell. However, at low MOI (0.5 pfu/cell) the **virus productivity** per cell was significantly higher at high cell/bead loading in cultures of either microcarrier type. The maximum virus titre (8.5 x 10(9) pfu/mL) was obtained in Cytodex-1 cultures with a low MOI (0.5 pfu/cell) and a cell/bead loading of 1,000. The **virus productivity** per cell in these cultures was 4,000 pfu/cell. The lower viral yield in the Cultispher-G microcarrier cultures is attributed to a decreased accessibility of the entrapped cells to viral infection. The high viral productivity from the Vero cells in Cytodex-1 cultures suggests that this is a suitable system for the development of a vaccine production system for the Reoviridae viruses.

L16 ANSWER 12 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1998:236826 BIOSIS
DOCUMENT NUMBER: PREV199800236826
TITLE: **Reovirus** isolation and RNA **extraction.**
AUTHOR(S): Uyeda, Ichiro [Reprint author]; Lee, Bong-Choon; Ando, Yuko; Suga, Haruhisa; He, Yun-Kun; Isogai, Masamichi
CORPORATE SOURCE: Fac. Agric., Hokkaido Univ. Kita-ku, Sapporo, Japan
SOURCE: Foster, G. D. [Editor]; Taylor, S. C. [Editor]. METH MOL BIOL, (1998) pp. 65-75. Methods in Molecular Biology; Plant virology protocols: From virus isolation to transgenic resistance. print.
Publisher: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA. Series: Methods in Molecular Biology.
CODEN: MMBYBO. ISSN: 0097-0816. ISBN: 0-89603-385-6.

DOCUMENT TYPE: Book
Book; (Book Chapter)
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Jun 1998
Last Updated on STN: 4 Jun 1998

L16 ANSWER 13 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1998:312773 BIOSIS
DOCUMENT NUMBER: PREV199800312773
TITLE: Identification and characterization of RNA-binding activities of avian reovirus non-structural protein deltaNS.
AUTHOR(S): Yin, Hsien Sheng; Lee, Long Huw [Reprint author]
CORPORATE SOURCE: Dep. Vet. Med., Natl. Chung Hsing Univ., Taichung 403, Taiwan
SOURCE: Journal of General Virology, (June, 1998) Vol. 79, No. 6, pp. 1411-1413. print.
CODEN: JGVIAY. ISSN: 0022-1317.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jul 1998
Last Updated on STN: 13 Aug 1998

AB Cytoplasmic **extracts prepared** from avian **reovirus** (ARV) strain S1133-**infected** chicken embryo fibroblasts were examined for the presence of RNA-binding proteins in order to identify and characterize ARV RNA-binding proteins. Analysis of binding activity to poly(A)-Sepharose indicated that infected cells contained significant amounts of a protein that co-migrated with ARV protein sigmaNS present in total **virus**-infected cell **extracts.** Determination of the N-terminal amino acid sequence of several peptide fragments generated by VS protease digestion of the poly(A)-Sepharose-purified protein confirmed that this viral protein was sigmaNS. Competition assays showed that single-stranded RNA from the unrelated avian pathogen infectious bursal disease virus was able to compete for binding of sigmaNS to poly(A)-Sepharose. These data suggest that ARV sigmaNS binds to single-stranded RNA in a nucleotide sequence non-specific manner and is functionally similar to its counterpart specified by mammalian reovirus.

L16 ANSWER 14 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1997:454689 BIOSIS
DOCUMENT NUMBER: PREV199799753892
TITLE: Immune response to avian reovirus in chickens and protection against experimental infection.
AUTHOR(S): Meanger, J. [Reprint author]; Wickramasinghe, R.; Enriquez, C. E.; Wilcox, G. E.
CORPORATE SOURCE: Children's Virology Res. Unit, Macfarlane Burnet Centre Med. Res., Yarra Bend Road, Fairfield, VIC 3078, Australia
SOURCE: Australian Veterinary Journal, (1997) Vol. 75, No. 6, pp. 428-432.
CODEN: AUVJA2. ISSN: 0005-0423.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Oct 1997
Last Updated on STN: 27 Oct 1997

AB Objectives: To assess the efficacy of the vaccination procedure and the effect of the transfer of maternal antibodies to progeny chickens on reovirus pathogenicity. Design: To vaccinate chickens and challenge

progeny chickens with high doses of homologous and heterologous viruses. Procedure: High doses of reovirus strains RAM-1, 1091 and 724 were used to induce tenosynovitis lesions. High doses were **produced** by concentration of **viruses** grown in cell culture. Then similar doses of viruses were used to challenge immunised chickens progeny. Result: Vaccination of breeding hens with the RAM-1 strain of avian reovirus, which resulted in the passive transfer of neutralising antibody to progeny chickens, completely prevented the development of tenosynovitis in 80% of progeny chickens infected with the homologous virus. Even though multiple injection of hens resulted in broadening of the normal type-specificity of the neutralising antibody response against heterologous serotypes of avian reovirus, only marginal protection against strains of two heterologous serotypes of avian reovirus was obtained. Conclusions: A model for assessing the efficacy of vaccination against avian reovirus strains on clinical signs such as tenosynovitis was developed that overcome the normal low virulence of Australian strains of avian reovirus. Breeding hens can be immunised with Australian strain of avian reovirus with passive transfer of antibody via the yolk to the progeny chickens. Although the neutralising antibody response to three injections of inactivated virus decreased the specificity of the neutralising antibody response against antigenically heterologous strains of avian reovirus, the protective immunity appeared to retain type-specificity.

L16 ANSWER 15 OF 30 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 97008925 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8856035
TITLE: Effect of protectants in L-drying on the conformation and **infectivity** of rice dwarf **phytoreovirus.**
AUTHOR: Fukumoto F; Omura T; Kimura I
CORPORATE SOURCE: National Research Institute of Vegetables, Ornamental Plants and Tea, Mie, Japan.
SOURCE: Archives of virology, (1996) 141 (8) 1579-85.
Journal code: 7506870. ISSN: 0304-8608.
PUB. COUNTRY: Austria
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199611
ENTRY DATE: Entered STN: 19961219
Last Updated on STN: 19961219
Entered Medline: 19961119

AB Purified rice dwarf phytoreovirus preparations, after rehydration following drying without freezing (L-drying) and sucrose density gradient centrifugation, sedimented to the same position as untreated controls. Upon **storage** at 65 degrees C, virion conformation in L-dried preparations supplemented with 1% sucrose was maintained better than without additives. Moreover, during **storage** for 6 years at -70 degrees C, infectivity of L-dried preparations from crude extracts of infected rice plants containing 5% sucrose was higher than controls based on the number of count of infected foci on cell monolayers and transmission to rice seedlings by leafhopper of the vector Nephotettix cincticeps, which had been injected with such extracts.

L16 ANSWER 16 OF 30 MEDLINE on STN
ACCESSION NUMBER: 93283461 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8389597
TITLE: Chemiluminescent detection of infectious bursal disease virus with a PCR-generated nonradiolabeled probe.
AUTHOR: Akin A; Wu C C; Lin T L; Keirs R W

CORPORATE SOURCE: College of Veterinary Medicine, Mississippi State University, MS 39762.
SOURCE: Journal of veterinary diagnostic investigation : official publication of the American Association of Veterinary Laboratory Diagnosticians, Inc, (1993 Apr) 5 (2) 166-73. Journal code: 9011490. ISSN: 1040-6387.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199307
ENTRY DATE: Entered STN: 19930723
Last Updated on STN: 19970203
Entered Medline: 19930713

AB A polymerase chain reaction (PCR)-generated digoxigenin-labeled nonradioactive oligonucleotide probe was developed and utilized in slot-blot hybridization coupled with chemiluminescence for the detection of infectious bursal disease virus (IBDV). The probe was prepared from the RNA of the standard challenge strain (STC) of IBDV serotype 1 by reverse transcription followed by 2 PCR amplifications with 2 separate sets of primers. RNA of STC **viruses prepared** from bursae infected with STC viruses was subjected to the first PCR with the outer primers V8 and V9 that amplified a 607-base pair (bp) segment. The PCR product from the first PCR was eluted following agarose gel electrophoresis and subjected to the second PCR with the nested primers V6 and V7 that flanked a 351-bp segment. In the second PCR, dTTP was substituted by digoxigenin-11-dUTP in the PCR reaction mixture so that the amplified 351-bp DNA products were labeled with digoxigenin. The specificity of the PCR-generated digoxigenin-labeled probe was tested on different strains of IBDV, several unrelated avian viruses, and bacteria by slot-blot hybridization assay. Hybridization was detected by chemiluminescence. The sensitivity of the probe was assayed using 10-fold serial dilutions of purified RNA from the STC strain of IBDV. The PCR-generated digoxigenin-labeled probe hybridized with genomic RNA of STC and variant strains A, D, E, G, and GLS-5 of IBDV serotype 1 but not OH strain of IBDV serotype 2. The probe did not react with avian **reovirus**, **infectious** bronchitis virus, Salmonella enteritidis, Escherichia coli, or Staphylococcus aureus.(ABSTRACT TRUNCATED AT 250 WORDS)

L16 ANSWER 17 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1993:52699 BIOSIS
DOCUMENT NUMBER: PREV199395029001
TITLE: Coating and storing enzyme-linked immunosorbent assay plates used for analysis of avian pathogens to give a long shelf-life.
AUTHOR(S): Roberts, B. [Reprint author]; Howes, K.
CORPORATE SOURCE: 127 Boyn Valley Rd., Maidenhead, Berks. SL6 4DT, UK
SOURCE: Food and Agricultural Immunology, (1992) Vol. 4, No. 2, pp. 103-112.
ISSN: 0954-0105.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 13 Jan 1993
Last Updated on STN: 13 Jan 1993

AB Enzyme-linked immunosorbent assays (ELISAs) were developed for the detection of antibodies to Mycoplasma synoviae, Pasteurella multiocida, **reovirus**, **infectious** bursal disease virus (IBDV), infectious bronchitis virus (IBV), and egg-drop syndrome (EDS). Purified

antigenic preparations derived from the various pathogens were used to coat microtitre plates and their shelf-life was determined. There were no significant differences in ELISA absorbance values determined on paired antigen coated microtitre plates stored at -20 degree C and at room temperature, desiccated, for 63 days. When stored at 4 degree C, desiccated, antigen coated plates had a self-life of up to 390 days. A linear relationship was established between the two sets of values with correlation coefficients ranging from 0.796 to 0.993.

L16 ANSWER 18 OF 30 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 92042552 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1939508
TITLE: Stability and extractability of double-stranded RNA of pangola stunt and sugarcane Fiji disease viruses in dried plant tissues.
AUTHOR: Karan M; Hicks S; Harding R M; Teakle D S
CORPORATE SOURCE: Department of Microbiology, University of Queensland, Brisbane, Australia.
SOURCE: Journal of virological methods, (1991 Jun) 33 (1-2) 211-6. Journal code: 8005839. ISSN: 0166-0934.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199111
ENTRY DATE: Entered STN: 19920124
Last Updated on STN: 19920124
Entered Medline: 19911125

AB When leaves infected with pangola stunt virus (PaSV) were dried at 23, 37, 50, 70 or 105 degrees C, the dsRNA was stable and could be extracted after aerobic **storage** at room temperature for 1 month, although at 105 degrees C the amount obtained was reduced. The dsRNA was also recovered after leaves were freeze dried and stored in vacuo at room temperature for 6 months, or were dried and stored aerobically at room temperature for 10.5 months. dsRNA of sugarcane Fiji disease virus (FDV) was also stable when infected leaves were dried at 23, 37, 50 or 105 degrees C and stored aerobically for 3 months or for at least 6 months when infected leaves were dried at 70 degrees C. The unexpected high stability and extractability of both PaSV and FDV dsRNA when dried in leaves at low or high temperatures and stored at room temperature indicate that these, and probably other plant-**infecting reoviruses**, can be transported readily in desiccated host tissue between different countries for later extraction and comparison of their dsRNAs.

L16 ANSWER 19 OF 30 MEDLINE on STN DUPLICATE 7
ACCESSION NUMBER: 92023475 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1656552
TITLE: Thymic atrophy in type 2 **reovirus infected** mice: immunosuppression and effects of thymic hormone. Thymic atrophy caused by reo-2.
AUTHOR: Onodera T; Taniguchi T; Tsuda T; Yoshihara K; Shimizu S; Sato M; Awaya A; Hayashi T
CORPORATE SOURCE: National Institute of Animal Health, Ibaraki, Japan.
SOURCE: Thymus, (1991 Sep) 18 (2) 95-109. Journal code: 8009032. ISSN: 0165-6090.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199111

ENTRY DATE: Entered STN: 19920124
Last Updated on STN: 19970203
Entered Medline: 19911114

AB Suckling mice **infected** with **reovirus** type 2 showed a thymic atrophy followed by a marked suppression of the antibody, production to SRBC (a T cell dependent antigen) and bacterial LPS, when measured by the splenic PFC assay. The PFCs produced were sometimes less than 1% of uninfected control animals. Histologically the thymus was usually smaller than normal, and atrophy of the cortex and increased number of Hassal's bodies were observed. Number of nucleated cells in the thymus of infected mice showed 90% decrease as compared to uninfected mice. The spleen, although larger in size, showed depletion of lymphocytes from the thymus-dependent and follicular areas. No viral replication was detected in lymphatic organs using virological **methods.** Virus-infected mice transferred with the splenocytes or thymocytes from age-matched uninfected mice restored the antibody production against SRBC to normal levels. Thymocytes were more efficient than splenocytes in enhancing the antibody **production** in **virus**-infected mice. Injection of several different kinds of immunopotentiating agents enhanced the antibody production to SRBC, although LPS exacerbated the unresponsiveness. Thymic hormones such as FTS and TP5 enhanced antibody production to SRBC and LPS more efficiently than MDP. Flow cytometric analysis showed that percentage of CD4+ single positive cells was slightly increased in virus-infected mice treated with FTS, while there was no difference in the phenotypic distributions of thymocyte subpopulations among virus-infected mice, FTS-untreated and FTS-treated normal mice.

L16 ANSWER 20 OF 30 MEDLINE on STN DUPLICATE 8
ACCESSION NUMBER: 89085602 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2642627
TITLE: Identification of the sigma 1S protein in **reovirus** serotype 2-**infected** cells with antibody prepared against a bacterial fusion protein.
AUTHOR: Cashdollar L W; Blair P; Van Dyne S
CORPORATE SOURCE: Department of Microbiology, Medical College of Wisconsin, Milwaukee 53226.
SOURCE: Virology, (1989 Jan) 168 (1) 183-6.
Journal code: 0110674. ISSN: 0042-6822.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198902
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 20021019
Entered Medline: 19890206

AB A bacterial expression vector, pATH 3, was used to produce high levels of a fusion protein composed of a portion of the trpE protein of Escherichia coli and the putative sigma 1S coding region from the S1 gene of reovirus serotype 2. The fusion protein was purified and injected into rabbits to prepare antisera. This antibody was able to detect sigma 1S being synthesized in L929 cells **infected** with **reovirus** serotype 2 by means of immunoprecipitation and immunoblotting **techniques.** The peak of sigma 1S accumulation in type 2-infected cells was shown to occur approximately 20 hr after infection. This report represents the first description of sigma 1S **production** in **reovirus** serotype 2-**infected** cells.

L16 ANSWER 21 OF 30 MEDLINE on STN DUPLICATE 9

ACCESSION NUMBER: 88248001 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3380790
TITLE: Avian reovirus mRNAs are nonfunctional in infected mouse cells: translational basis for virus host-range restriction.
AUTHOR: Benavente J; Shatkin A J
CORPORATE SOURCE: Center for Advanced Biotechnology and Medicine, Piscataway, NJ 08855-0759.
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (1988 Jun) 85 (12) 4257-61. Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198807
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19980206
Entered Medline: 19880725

AB Avian reovirus S1133 penetrates and uncoats in **suspension cultures** of mouse L cells. The multiple species of viral transcripts are produced in the cytoplasm of the infected cell, but they fail to associate with polysomes, consistent with the absence of viral protein synthesis. The selective block in avian virus mRNA translation is not overcome by **coinfection** with mammalian **reovirus** type 3, which replicates in mouse L cells, or by hypertonic shock or exposure to a low concentration of cycloheximide. Although the avian viral transcripts are inactive in vivo, RNA extracted from infected, nonpermissive L cells directs the synthesis of a normal spectrum of viral proteins in rabbit reticulocyte lysates. These results indicate that avian viral transcription is not restricted in mouse cells and that viral replication is prevented at the level of initiation of protein synthesis.

L16 ANSWER 22 OF 30 MEDLINE on STN DUPLICATE 10
ACCESSION NUMBER: 88293374 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3135794
TITLE: The propagation of avian viruses in a continuous cell line (QT35) of Japanese quail origin.
AUTHOR: Cowen B S; Braune M O
CORPORATE SOURCE: Department of Veterinary Science, College of Agriculture, Pennsylvania State University, University Park 16802.
SOURCE: Avian diseases, (1988 Apr-Jun) 32 (2) 282-97. Journal code: 0370617. ISSN: 0005-2086.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198808
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880826

AB Seven of nine avian virus families tested (Birnaviridae, Coronaviridae, Herpesviridae, Paramyxoviridae, Poxviridae, Reoviridae, and Retroviridae) were found to replicate in a quail fibroblast cell line, designated QT35, resulting in a cytopathic effect (CPE) visible with the naked eye or by low-power microscopy. In comparison, only one (Paramyxoviridae) of seven mammalian **virus** families tested **produced** an observable CPE. Cytopathic changes induced by examined viruses were round cell, syncytial, and focus formation. Trypsin did not promote cytopathic changes by selected CPE-negative avian and mammalian viruses in QT35

cells. Several avian viruses (infectious bursal disease virus, Newcastle disease virus, Canary pox virus, and reovirus) formed plaques under agar. Avian **reovirus** and **infectious** bursal disease **virus produced** similar titers in chicken embryo fibroblast (CEF) and QT35 cell cultures. Chicken-egg-yolk neutralizing-antibody titers to IBDV were comparable in CEF and QT35 cell-culture systems.

L16 ANSWER 23 OF 30 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 1988:112550 BIOSIS
DOCUMENT NUMBER: PREV198885058020; BA85:58020
TITLE: A MODIFIED ELISA FOR DETECTION OF ANTIVIRAL ANTIBODIES IN CHICKEN SERA WHICH INCLUDES THE USE OF VIRUS-FREE CELLULAR ANTIGENS TO CONTROL THE SPECIFICITY OF ASSAY RESULTS.
AUTHOR(S): BULOW V V [Reprint author]; LESJAK M
CORPORATE SOURCE: INST GEFLUGELKRANKHEITEN, KOSERSTRASSE 21, D-1000 BERLIN 33
SOURCE: Journal of Veterinary Medicine Series B, (1987) Vol. 34, No. 9, pp. 655-669.
CODEN: JVMBE9. ISSN: 0931-1793.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: GERMAN
ENTRY DATE: Entered STN: 23 Feb 1988
Last Updated on STN: 23 Feb 1988

AB A modified ELISA with enhanced specificity was developed to assay chicken sera for antibodies to a variety of avian viruses, namely adenovirus, adeno-associated virus (AAV), infectious laryngotracheitis (ILT) virus, Marek's disease virus (MDV), herpesvirus of turkeys (HVT), **reovirus**, **infectious** bursal disease virus (IBDV), Newcastle disease virus (NDV), reticuloendotheliosis virus (REV), Rous sarcoma virus (RSV) and infectious bronchitis virus (IBV). Crude clarified **preparations** of sonicated **virus**-infected and uninfected cultured cells served as viral antigens or as control antigens, respectively, for coating wells of ELISA microplates. Alternate rows of wells were coated with viral antigen and the corresponding control antigen. All test serum dilutions were allowed to react with both antigens in adjacent wells. Virus-specific reactivity of assayed sera was evaluated by absorbance differences for viral and control antigens. Significant differences between reactions in adjacent wells could also be evaluated visually. This ELISA **method** proved to be highly specific and sensitive. False-positive results were virtually no problem. Antibody titres determined by the ELISA were generally 10- to 20-fold higher then those of indirect fluorescent antibody (FA) tests and, except for NDV, at least as high as the neutralizing antibody titres. Cross-reactions between different serotypes of adenovirus, MDV and HVT, and IBV occurred at essentially the same levels in the ELISA as they were detected by indirect FA tests. There was a rather close relation between serotypes of IBV, or MDV and HVT, whereas differences between adenovirus serotypes were much more distinct.

L16 ANSWER 24 OF 30 MEDLINE on STN DUPLICATE 11

ACCESSION NUMBER: 85030474 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6490660
TITLE: Mechanism of interferon action. Increased phosphorylation of protein synthesis initiation factor eIF-2 alpha in interferon-treated, **reovirus-infected** mouse L929 fibroblasts in vitro and in vivo.
AUTHOR: Samuel C E; Duncan R; Knutson G S; Hershey J W
CONTRACT NUMBER: AI-12520 (NIAID)

AI-20611 (NIAID)
GM-22135 (NIGMS)
SOURCE: Journal of biological chemistry, (1984 Nov 10) 259 (21) 13451-7.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198412
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19980206
Entered Medline: 19841212

AB The effect of interferon (IFN) treatment and virus infection on the phosphorylation both in vitro and in vivo of the alpha subunit of protein synthesis initiation factor eIF-2 (eIF-2 alpha) was examined in mouse fibroblast L929 cells. The [gamma-32P]ATP-mediated in vitro phosphorylation of eIF-2 alpha catalyzed by cell-free extracts prepared from IFN-treated, uninfected cells was dependent upon exogenously added double-stranded RNA (dsRNA). However, the dsRNA requirement for eIF-2 alpha phosphorylation in vitro was eliminated by prior **infection** of cells with **reovirus** Dearing strain virions but not with defective top component particles. The enhanced phosphorylation in vitro of eIF-2 alpha and ribosome-associated protein P1 depended in a similar manner upon the multiplicity of virus infection. The extent of phosphorylation in vivo of eIF-2 alpha prepared from L929 cells was also examined by utilizing two-dimensional isoelectric focusing/sodium dodecyl sulfate-polyacrylamide gel electrophoresis and immunoblotting **techniques.** About 5-10% of the eIF-2 alpha was typically phosphorylated in vivo in untreated, mock-infected cells, whereas 25-30% was phosphorylated in IFN-treated, **reovirus-infected** cells. An intermediate extent of eIF-2 alpha phosphorylation, routinely between 15 and 20%, was observed with either IFN treatment or **reovirus infection** alone. The integrity of eIF-4A and eIF-4B was also examined by two-dimensional electrophoresis and immunoblotting, and no significant alterations in molecular size or charge heterogeneity were detected when these factors were **prepared** from IFN-treated, **reovirus-infected** cells as compared to untreated, uninfected cells.

L16 ANSWER 25 OF 30 MEDLINE on STN DUPLICATE 12
ACCESSION NUMBER: 84079518 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6197057
TITLE: Studies on interferon induction and interferon sensitivity of avian reoviruses.
AUTHOR: Ellis M N; Eidson C S; Brown J; Kleven S H
SOURCE: Avian diseases, (1983 Oct-Dec) 27 (4) 927-36.
Journal code: 0370617. ISSN: 0005-2086.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198401
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19970203
Entered Medline: 19840127

AB Four strains of avian reovirus were ineffective inducers of interferon (IFN) in chicken kidney (CK) cell cultures. All strains were similar in single-cycle replication curves. At multiplicities of infection between 0.20 and 10 plaque-forming units per cell, IFN was not induced in CK

cells. **Reovirus** did not **produce** an IFN blocker in CK cells. Attenuated reovirus did induce IFN in aged chicken embryo fibroblast (CEF) cell cultures. By priming cells with a low dose of IFN before **infection** with **reovirus**, IFN formation by CEF could be enhanced. Ultraviolet-inactivated avian reovirus was an effective inducer of IFN in both CK and CEK cell cultures. The sensitivity of avian reoviruses (Fahey-Crawley, Reo-25, S-1133, Reo-V) to chicken interferon (Ch-IFN) was studied by the plaque-reduction **method.** Avian reoviruses were less sensitive to Ch-IFN than was vesicular stomatitis virus or Semliki Forest virus and appeared to be as resistant to IFN as was Newcastle disease virus.

L16 ANSWER 26 OF 30 MEDLINE on STN DUPLICATE 13
ACCESSION NUMBER: 83073411 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7149719
TITLE: Aerosol stability of **infectious** and potentially **infectious reovirus** particles.
AUTHOR: Adams D J; Spendlove J C; Spendlove R S; Barnett B B
SOURCE: Applied and environmental microbiology, (1982 Oct) 44 (4) 903-8.
Journal code: 7605801. ISSN: 0099-2240.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198301
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 19900317
Entered Medline: 19830107

AB The aerosol stability of two particle forms, infectious and potentially **infectious**, of **reovirus** were examined under static conditions for a range of relative humidities at 21 and 24 degrees C. Virus aerosolization efficiency was determined for two **methods** of dissemination: Collison nebulizer and Chicago atomizer. Suspensions of Bacillus subtilis var. niger spores were added to **reovirus preparations** that included both particle forms and disseminated into a dynamic aerosol toroid to estimate the physical decay of the aerosols. At 90 to 100% relative humidity, both reovirus particle forms showed less than 10-fold loss of infectivity after 12 h of aging. At lower relative humidities the aerosol decay curve showed rapid initial decay followed by a markedly lower decay rate. Our findings reveal that reovirus particles are relatively stable in the airborne state.

L16 ANSWER 27 OF 30 MEDLINE on STN DUPLICATE 14
ACCESSION NUMBER: 78166808 MEDLINE
DOCUMENT NUMBER: PubMed ID: 206327
TITLE: Sensitivity and specificity of the fluorescent antibody **technique** for detection of infectious laryngotracheitis virus.
AUTHOR: Ide P R
SOURCE: Canadian journal of comparative medicine. Revue canadienne de medecine comparee, (1978 Jan) 42 (1) 54-62.
Journal code: 0151747. ISSN: 0008-4050.
PUB. COUNTRY: Canada
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197807
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19900314

Entered Medline: 19780724

AB The specificity of a fluorescent conjugate to infectious laryngotracheitis virus was examined using chick trachea organ culture or tissue sections infected with other avian viruses (adenovirus, **infectious** bronchitis, poxvirus, **reovirus**, Newcastle disease virus, Marek's disease virus, avian encephalomyelitis and infectious bursal agent) or Mycoplasma gallisepticum. Confirmation of **virus** replication in these **preparations** was obtained by either 1) demonstration of virus titre increase or 2) demonstration of fluorescence when using the homologous conjugate. Once either of these criteria had been satisfied, negative results with the infectious laryngotracheitis conjugate were taken to indicate that the conjugate would not present false positive results in differentiated cells infected with these heterologous viruses. The spectrum of reactivity of the infectious laryngotracheitis conjugate was then examined on organ cultures infected with several infectious laryngotracheitis isolates from across Canada. Finally, the conjugate was applied to experimental and natural cases of infectious laryngotracheitis and its efficiency was compared to routine virus isolation **methods**
.

L16 ANSWER 28 OF 30 MEDLINE on STN DUPLICATE 15
ACCESSION NUMBER: 77023840 MEDLINE
DOCUMENT NUMBER: PubMed ID: 975112
TITLE: Cell surface alterations on colon adenocarcinoma cells.
AUTHOR: Kahan B D; Rutzky L; Berlin B; Tomita J; Wiseman F; LeGrue S; Noll H; Tom B H
SOURCE: Cancer research, (1976 Sep) 36 (9 PT 2) 3526-34.
Journal code: 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197701
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19770103

AB By the use of five independent **techniques**, cell surface alterations distinctive of malignant as compared to normal colon cells were detected on in vivo surgical specimens and on cultured cell lines established in our laboratory. The findings, which were distinctive of the malignant as compared to the normal cell included: (a) polymorphism of surface microvilli on scan electron microscopy; (b) decreased susceptibility to **infection** with vaccinia and **reovirus**, but not to herpes, adeno- or **echovirus**: (c) **production** of large quantities of carcinoembryonic antigen; (d) presence of specific membrane proteins on sodium dodecyl sulfate-polyacrylamide gel analysis of plasma membranes purified from cell homogenates by ultracentrifugation in polyethylene glycol-dextran partitions; and (e) reaction with specific, cytotoxic, rabbit heteroantisera. Solubilized extracts of the malignant cells formed precipitin lines with the heteroantisera, suggesting that the distinctive antigens could be released from the cell surface. These results suggest that human colon carcinomas bear tumor-distinctive proteins and offer the prospect of specific immunodiagnostic reagents and immunotherapeutic tools.

L16 ANSWER 29 OF 30 EMBASE
on STN
ACCESSION NUMBER: 76039952 EMBASE
DOCUMENT NUMBER: 1976039952
TITLE: Synthesis of all the gene **products** of the

reovirus genome in vivo and in vitro.
AUTHOR: Both G.W.; Lavi S.; Shatkin A.J.
CORPORATE SOURCE: Dept. Cell Biol., Roche Inst. Molec. Biol., Nutley, N.J. 07110, United States
SOURCE: Cell, (1975) 4/2 (173-180).
CODEN: CELLB5
DOCUMENT TYPE: Journal
FILE SEGMENT: 022 Human Genetics
047 Virology
LANGUAGE: English
AB Sixteen virus specific polypeptides have been resolved in **reovirus infected** mouse L cells by using SDS polyacrylamide slab gel electrophoresis and autoradiography. Of these, ten have been designated as primary products of the genome by the following criteria: they are present in lysates of infected cells labeled for a short time; they co migrate on SDS polyacrylamide slab gels with polypeptides synthesized in cell free extracts of wheat germ in response to purified viral mRNA, and their molecular weights correspond to the values expected if all ten reovirus mRNA species are monocitronic. Reovirus mRNA species lack 3 poly(A) but are translated into proteins of the expected size. The pattern of synthesis of the primary gene products observed in vitro mimicks that observed in **reovirus infected** cells suggesting that the structure of the mRNA may profoundly influence its translation. The results further indicate that there is little, if any, exclusively regulatory information in the reovirus genome since both in vivo and in vitro, transcripts of the ten genome segments direct the synthesis of ten polypeptides that presumably correspond to the primary gene products. The expression of the reovirus genome thus appears to be complete.

L16 ANSWER 30 OF 30 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 76043572 EMBASE
DOCUMENT NUMBER: 1976043572
TITLE: Cultivation of reovirus in human embryo organ cultures (Russian).
AUTHOR: Trofimov N.M.; Malkhanov V.B.; Levina D.S.
CORPORATE SOURCE: Inst. Virusol., AMN SSSR, Moscow, Russia
SOURCE: Voprosy Virusologii, (1975) 20/2 (147-151).
CODEN: VVIRAT
DOCUMENT TYPE: Journal
FILE SEGMENT: 047 Virology
005 General Pathology and Pathological Anatomy
LANGUAGE: Russian
AB Cultures of human embryo lung and intestine were **infected** with **reovirus** type 3 isolated from the lungs of a newborn baby. In the lung organ culture the **virus** multiplied quite intensively, **producing** in the bronchi characteristic cells with 4 to 6 nuclei. (12 references.)